

**Claims**

1-8 Canceled

9. (New) A Method of monitoring an electrohydraulic brake system for motor vehicle, having a master brake cylinder (2) operable by a brake pedal (1), a travel simulator (3) cooperating with the brake pedal (1), at least one pressure source actuable by an electronic regulation and control unit (16) which is formed of a high-pressure accumulator (21) that can be charged by means of a pump (23), and the pressure of the pump can be applied to wheel brakes (7, 8) of the vehicle which are connectable to the master brake cylinder (2), on the other hand, by means of at least one hydraulic connection (5) that can be closed by means of a separating valve (11), with a device (33) for detecting the driver's deceleration request, and with each one inlet valve (17, 18 connected upstream of the wheel brakes (7, 8) and an outlet valve (27, 28), the method comprising:

deactivating an electronic control associated with a charging operation of a high-pressure accumulator and carried out by an electronic regulation and control unit;

closing a separating valve associated with a vehicle axle,

opening inlet valves associated with the vehicle axle for the purpose of displacing pressure fluid volume into wheel brakes of the vehicle axle, while determining values representative of a hydraulic pressure introduced into the wheel brakes and a displacement of pressure fluid volume; and

evaluating the values to judge the condition of the wheel brakes.

10. (New) The method according to claim 9, wherein the displacement of pressure fluid, with the high-pressure accumulator charged, takes place by partly opening the inlet valves and in the reduction of the pressure fluid volume contained in the high-pressure accumulator is taken into consideration as an indicator of the displacement of pressure fluid.

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11. (New) The method according to claim 9, wherein the displacement of pressure fluid into the wheel brakes, with the high-pressure accumulator discharged, takes place as a result of actuation of the pump and complete opening of the inlet valves.
12. (New) The method according to claim 11, wherein the displacement of pressure fluid is approximated by numerical integration of the pump volume flow within the electronic control unit.
13. (New) The method according to claim 12, wherein values representing the hydraulic pressure and the displacement of pressure fluid volume are compared with previously defined threshold values and the results of the comparison are subjected to a time pressure/volume correlation.
14. (New) The method according to claim 13, wherein a condition is concluded from an increase of the hydraulic pressure introduced into the wheel brakes in excess of the previously defined threshold value, during which the indicator of the displacement of pressure fluid does not reach the threshold value, in which condition the friction elements of the wheel brakes are applied to their associated friction surfaces.
15. (New) The method according to claim 14, the indicator of the displacement of pressure fluid exceeds the threshold value and the hydraulic pressure introduced into the wheel brakes does not reach the threshold value, an inadmissible displacement travel of pistons provided in the wheel brakes is concluded, representing an imminent risk to maintenance staff during maintenance works at the wheel brakes.
16. (New) A method according to claim 15, an optical or an acoustic warning is issued upon detection of the inadmissible displacement travel of the pistons.